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### M 274.01: Introduction to Differential Equation (Applied Differential Equations)

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SYLLABUS: MATH 274  
APPLIED DIFFERENTIAL EQUATIONS

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<http://web.math.umd.edu/bardsley/courses/274/274.html>

**Time and Place:** MWF 12:10-1pm, MA312.

**Text:** Blanchard, Devaney, and Hall, *Differential Equations*, 3<sup>rd</sup> Ed., Brooks Cole, 2005.

**Prerequisites:** Calculus or Applied Calculus.

**Office Hours:** Monday, Wednesday and Friday at 2:10pm.

**LEARNING GOALS:**

1. To learn elementary techniques for the integration of first and second order ordinary differential equations.
2. To conduct basic qualitative analysis of ordinary differential equations and systems.
3. To formulate simple models of real life phenomena in terms of differential and/or difference equations.

**ASSESSMENT/GRADING:** Your course grade will be determined as follows:

		Total points
Exam 1	E1	100
Exam 2	E2	100
Exam 3	E3	100
Final	F	200
Quizzes	Q	100

*Quizzes:* Homework will be assigned most every day and hand written solutions will be posted on the web page. Quizzes will be given once a week with problems based closely on the homework and will be worth 10 pts each. Your final quiz grade Q will be your percent average from all the quizzes after your lowest quiz score has been dropped.

*Exams:* Exams will be based closely on homework and quiz material.

*Final Grade:* The final will be optional. If you choose not to take the final, your final percent score for the course will be

$$\text{percent} = (E1+E2+E3+Q)/4.$$

If you take the final, your final percent score will be

$$\text{percent} = (E1+E2+E3+F+Q)/6.$$

Moreover, if your final exam percent score ( $F/2$ ) is higher than E1, E2, or E3, I will replace the lowest of those three scores by  $F/2$ . Thus if you bomb an exam, you'll have the opportunity to overwrite the score.

*Modifications:* There's a chance that I'll make slight modifications to the above.

**HOW TO BE SUCCESSFUL:** Don't miss class. Do the homework when it's assigned. And remember that Math is not a spectator sport: the way to learn it is to work problems, not read the book or someone else's work. And finally, if you don't understand something, ask questions in class or come and see me right away.

**FOR ANY STUDENT WITH A DISABILITY:** If you have a disability that has, or might have, an effect on your performance in this class, please let me know. I will do my best to accommodate you.

**IMPORTANT DATES:**

Feb. 4

Last day to drop/add on CyberBear.

Feb. 14

Last day to change grade option.

April 7

Last day to drop without Dean's signature.

May 13

**Final exam**, Tuesday, 10:10 am - 12:10pm.